

The diagram shows a rectangular domain with a central square hole. The horizontal axis is labeled 'x' and the vertical axis is labeled 'y'. The central square hole is labeled 'hole'.

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HIGH-SPEED METAL CUTTING SUCCESSFUL AT CEGIELSKI PLANT

High-speed metal cutting was discussed at a meeting of innovators, technicians, and engineers held at the Cegielski Plant on 30 November 1949.

Much has been said of the achievements of Soviet metalworkers in high-speed cutting with hard alloys. Henryk Bortkevich of Leningrad received the Stalin Prize for exceeding 800 meters per minute in metalworking. With the cooperation of engineers and technicians, Polish metalworkers can also achieve increased speed in metal cutting by applying the Soviet method.

So far, an average of 100 meters or at the most 200 meters per minute has been achieved with the use of hard-alloy tools in steel cutting. Mateln himself pledged to exceed the average cutting speed by 300 meters per minute and, by applying the method of Northovich and Bykov, achieve an average speed of 400 meters per minute.

Lykowsky was the first to introduce hard alloys for metal cutting at the Cegielski Plant. He experimented with material purchased at his own expense and proved that blades of Vitid, an alloy almost as hard as a diamond, permitted faster turning of the work piece. He attained 600 percent of the norm by using hard alloys for metal cutting.

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At present Villa-faced casting tools are in general use. The number of hours worked with the use of hard alloys increased more than twofold in one year.

The past year has witnessed many changes at the Cegielski Plant. Hand drills, weighing 12 kilograms, have been replaced by automatic drills and much greater productivity and precision have been attained.

In 10 months, the workers of the Cegielski Plant submitted 137 innovations amounting to a saving of 19 million zlotys annually.

Instead of wasting time standing in line for tools, the workers now receive the required tools and lubricants from a supply wagon which services the workers at their stations.

The new method, however, presents many difficulties. Higher speed often requires more powerful motors, better bearings, a solution of the problem of negative clearance, and good handling of machines.

POLAND TO MAKE SLOTTED SCREENS -- Tydzień Warszawy, No 333, 3 Dec 49

Engineer T. Radowski invented a new method of manufacturing slotted screens used in coal processing and in the metallurgical, chemical, sugar and oil refining, and stone crushing industries. These screens, already tested and approved, will be manufactured in Poland. Up to now they were imported from other countries.

SETS STEEL SMELTING RECORD -- Dziennik Zachodni, No 298, 29 Oct 49

In Katowice, one of the crews has undertaken the work competition program to attain the highest steel production and to streamline the steel smelting processes. This crew, headed by Wladyslaw Galuski, chief smelter at the Martin furnace in the Ferrum Metallurgical Plant, attained an unprecedented record of 2 hours and 42 minutes for smelting steel.

The average time for smelting steel in this furnace heretofore was approximately 8 hours. This great reduction in time was accomplished through coordinated efforts of the entire crew and through better organization of the work. Among other things, the charging time was cut down from 1½ hours to 30 minutes.

Keeping the temperature constant not only reduced smelting time but resulted in a better-quality steel.

REDUCES STEEL SMELTING TIME -- Dziennik Zachodni, No 299, 30 Oct 49

On 1 October, the entire crew at the M furnace of the Myszkow Metallurgical Enterprise entered into an intershift work competition which helped reduce the smelting time of steel to 4 hours. This is an important accomplishment since the acid process is used for the smelting of steel and requires a longer time than the alkaline process.

TO PRODUCE FIRE-EXTINGUISHING APPARATUS -- Gazeta Ludowa, No 31, 16 Nov 49

Production of fire-extinguishing apparatus will begin, early in 1950, at the factories of the Centrala Handlowo-Techniczna (Business and Technical Supply Center) in the suburbs of Warsaw.

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Because of the shortage of fire-extinguishing equipment at the factories, the first production will go to industrial establishments.

The factory will manufacture aqueous fire extinguishers, and will produce, for the first time in Poland, foam type or chemical extinguishers for gasoline fires, and general purpose sprinklers. So far fires within a building surrounded by flames presented an insoluble problem because of the danger of suffocation. With the use of the all-purpose sprinkler attached to the nozzle of the hose, the fireman surrounds himself with a curtain of water and behind this protection can reach the most inaccessible spots. The plant will also manufacture sprinkler heads for the automatic sprinkler system and the Grinnel Fire Alarm System, which not only gives the alarm but indicates the exact location of the fire on the indicator board.

In addition to factory buildings, the establishment will have a research laboratory where models of fire-extinguishing apparatus will be tested. One building will be used exclusively for social activities and will contain a reading room dining room, modern kitchen, and showers. The doctor's quarters and infirmary will be located in the administration building.

Construction of the factory was started about 4 months ago and is progressing satisfactorily.

REFRIGERATION COMMISSION CREATED -- Gazeta Ludowa, No 31, 16 Nov 49

In accordance with the order of the chairman of the PKPG (State Economic Planning Commission) the Commission for Refrigeration was created in association with the PKPG under the direction of Michalowicz, the present manager.

The commission will coordinate the planning of production, supply, and investments of the refrigeration industry. The commission is also entrusted with the development of refrigeration industry in Poland.

All matters pertaining to the building of the new refrigeration plants, the expansion of existing plants, imports of refrigeration equipment, and all other matters associated with the refrigeration industry must be approved by the commission.

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